



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

11.07

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,685	12/10/2004	Robert C Fitzer	57894US004	3074
32692	7590	11/02/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			REIS, TRAVIS M	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/517,685	Applicant(s) FITZER ET AL.	
	Examiner Travis M. Reis	Art Unit 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-30 and 34-48 is/are pending in the application.
- 4a) Of the above claim(s) 8, 15-17, 19-30, 34-36, 41, 42, 44, 47 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-14, 18, 37-39, 43, 45 and 46 is/are rejected.
- 7) ☒ Claim(s) 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6, 9, 10, 18, 31, 38, & 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Boardman (U.S. Patent 3782204).

Boardman discloses a shock indicator (Figure 1) and method of manufacturing comprising providing a base (31) having a first side and a second side; an indicator (11) comprising a primary solid elastomeric plastic impingement object (25) of a large size, a solid material agglomerated powder (57)(col. 4 lines 6-11) coated over said impingement object of a color and differently colored surface modified panels (19) (col. 3 lines 9-10) of smaller sizes arranged in a first configuration when the shock indicator is in a first state prior to a shock event, and in a second configuration with dispersed powder in a second state following a shock event from any direction providing a visual contrast (Figure 4); and mechanical means (37) associated with the second side of the base for attachment of the shock indicator to a surface (Figure 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-14, 37, 45, & 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman.

With reference to claim 11, Boardman discloses all of the instant claimed invention as stated above in the rejection of claims 1-4, 6, 9, 10, 18, 31, 38, & 43, but does not disclose the indicator comprises power particles and a liquid.

Boardman discloses a second embodiment wherein the indicator comprises a mixture of castor oil, glycerine, and carbon black powder (col. 4 lines 15-17). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the liquid castor oil and glycerine disclosed by Boardman in the second embodiment to the agglomerate powder disclosed by Boardman in the first embodiment in order to provide a more permanent indication of shock.

With reference to claim 12, Boardman discloses mineral oil (col. 4 line 15) and that other types of printing media are usable.

Boardman does not disclose the powder is a clay. However, the particular type of material used to make the powder, absent any criticality, is only considered to be the use of a "preferred" or "optimum" material out of a plurality of well known materials that a person having ordinary skill in the art at the time the invention was made would have find obvious to provide using routine experimentation based, among other things, on the intended use of Applicant's apparatus, i.e., suitability for the intended use of Applicant's apparatus, and since the courts have stated that a selection of a material on the basis of suitability for intended use of an apparatus would be entirely obvious. See In re Leshin, 125 USPQ 416 (CCPA 1960). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to make the solid a clay in order to set up a particular predetermined acceleration indication.

With reference to claims 13 & 14, Boardman discloses mineral oil (col. 4 line 15) and that other types of printing media are usable.

Boardman does not disclose the powder is a clay filler. However, the particular type of material used to make the powder, absent any criticality, is only considered to be the use of a “preferred” or “optimum” material out of a plurality of well known materials that a person having ordinary skill in the art at the time the invention was made would have found obvious to provide using routine experimentation based, among other things, on the intended use of Applicant's apparatus, i.e., suitability for the intended use of Applicant's apparatus, and since the courts have stated that a selection of a material on the basis of suitability for intended use of an apparatus would be entirely obvious. See In re Leshin, 125 USPQ 416 (CCPA 1960). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to make the powder a clay filler in order to set up a particular predetermined acceleration indication.

Boardman does not disclose the liquid at 23°C has a surface tension within the range from about 10×10^{-3} N/m to about 80×10^{-3} N/m a density from about 0.5 to about 2grams/cm³, and a zero rate shear viscosity from about 1×10^{-3} to about 1×10^6 Pa-s. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a surface tension within the range from about 10×10^{-3} N/m to about 80×10^{-3} N/m a density from about 0.5 to about 2grams/cm³, and a zero rate shear viscosity from about 1×10^{-3} to about 1×10^6 Pa-s, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the “optimum range” involves only routine skill in the art. In re Aller, 105 USPQ 233. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to make the liquid have a surface tension within the range from about 10×10^{-3} N/m to about 80×10^{-3} N/m a density from about 0.5 to about 2grams/cm³, and a zero rate shear viscosity from about 1×10^{-3} to about 1×10^6 Pa-s in order to set up a particular predetermined acceleration indication.

With reference to claims 37 & 46, Boardman discloses all of the instant claimed invention as stated above in the rejection of claims 1-4, 6, 9, 10, 18, 31, 38, & 43, including the shock indicator can be associated with shipping goods (col. 1 lines 10-11).

Boardman does not disclose the goods are cellular telephones, personal digital assistants, hand held computers, and digital cameras. However, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to apply the shock indicator to these devices in order to determine whether they have been damaged if dropped.

With reference to claim 45, Boardman does not disclose a placing a plurality of indicators on the first side of said base. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a plurality of indicators, since it has been held that the mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add additional shock indicators in order to determine the extent of a shock event.

5. Claims 5 & 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman in view of Rubey (U.S. Patent 4239014).

Boardman discloses all of the instant claimed invention as stated above in the rejection of claims 1-4, 6, 9, 10, 18, 31, 38, & 43, but does not disclose the panels are transparent.

Rubey discloses a shock detector (11) with a transparent container (15) to allow for visual detection of a shock event (Figure 1). Therefore, it would have been obvious to one with

Art Unit: 2859

ordinary skill in the art at the time of the invention was made to make the panels disclosed by Boardman transparent as taught by Rubey in order that detection of a shock event will be discerned faster than opening and removing the indicator, and allow unaffected shock detectors to remain untouched.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman in view of Duncan (U.S. Patent 6663679).

Boardman discloses all of the instant claimed invention as stated above in the rejection of claims 1-4, 6, 9, 10, 18, 31, 38, & 43, but does not disclose the shock indicator further comprise means to indicate exposure to wetness.

Duncan discloses a high intensity non reversing humidity indicator (Figures 1-2) which provides indication of wetness and humidity when employed in order to indicate a possible corrosive environment (col. 6 lines 35-51). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the indicator disclosed by Duncan to the shock indicator disclosed by Boardman (i.e. through the mechanical means 37 to aid in attachment) in order to monitor for a corrosive environment.

Allowable Subject Matter

7. Claim 40 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

With reference to claim 40, the prior art of record does not disclose or clearly suggest a method for the manufacture of a shock indicator comprising depositing a slurry in association with the first side and thereafter drying the slurry, in combination with the remaining limitations in the claims.

Response to Arguments

9. In response to applicant's arguments that Boardman does not disclose a shock indicator comprising an agglomerated powder; these arguments have been fully considered but they are not persuasive since there is an agglomerated powder coating the sphere, as detailed above in paragraph 2.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M. Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2859

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Travis M Reis
Examiner
Art Unit 2859



Diego Gutierrez
Supervisory Patent Examiner
Tech Center 2800

tmr
October 19, 2006